

Training: Microsoft
MS-55318 Advanced Automated Administration with Windows PowerShell



TRAINING TERMS

2025-05-07 | 3 days | Virtual Classroom

TRAINING GOALS:

55318A is the updated version of the retired legacy MOC course 10962C. This three-day course teaches students how to automate administrative tasks using PowerShell. Students will learn crucial scripting skills such as creating advanced functions, writing controller scripts, and handling script errors. Candidates will learn how to use PowerShell when working with Microsoft Azure, SQL Server, Active Directory, IIS, Windows PowerShell Workflow, .NET resources, the REST API and XML, CSV & JSON formatted data files.

Audience profile:

This course is intended for IT professionals who are experienced in general Windows Server and Windows Client administration. Students should have a foundational knowledge of Windows PowerShell, which they can obtain by taking course 10961C: Automating Administration with Windows PowerShell.

In addition, this course provides scripting guidance for Microsoft Azure administrators and developers who support development environments and deployment processes.

At Course Completion:

- Create advanced functions.
- Use Microsoft .NET Framework and REST API in Windows PowerShell.
- Handle script errors.
- Use XML, JSON, and custom formatted data.
- Manage Microsoft Azure resources
- Analyze and debug scripts
- Understand Windows PowerShell workflow.

CONSPECT:

- Module 1: Creating advanced functions

- Lesson 1: Converting a command into an advanced function
- Lesson 2: Creating a script module
- Lesson 3: Defining parameter attributes and input validation
- Lesson 4: Writing functions that accept pipeline input
- Lesson 5: Producing complex pipeline output
- Lesson 6: Using comment-based Help
- Lesson 7: Using Whatif and Confirm parameters
- Lab 1: Creating advanced functions
- Module 2: Using Microsoft .NET Framework and REST API in Windows PowerShell
 - Lesson 1: Using .NET Framework in PowerShell
 - Lesson 2: Using REST API in PowerShell
 - Lab 1: Using Microsoft .NET Framework and REST API in Windows PowerShell
- Module 3: Writing controller scripts
 - Lesson 1: Understanding controller scripts
 - Lesson 2: Writing controller scripts with a user interface
 - Lesson 3: Writing controller scripts that create reports
 - Lab 1: Writing controller scripts
- Module 4: Handling script errors
 - Lesson 1: Understanding error handling
 - Lesson 2: Handling errors in a script
 - Lab 1: Handling script errors
- Module 5: Using XML, JSON, and custom-formatted data
 - Lesson 1: Working with XML formatted data
 - Lesson 2: Working with JSON formatted data
 - Lesson 3: Working with custom-formatted data
 - Lab 1: Working with XML and JSON formatted data
- Module 6: Enhancing server management with Desired State Configuration and Just Enough Administration
 - Lesson 1: Implementing Desired State Configuration
 - Lesson 2: Implementing Just Enough Administration
 - Lab 1: Creating and deploying a DSC configuration
- Module 7: Analyzing and debugging scripts
 - Lesson 1: Debugging in Windows PowerShell
 - Lesson 2: Analyzing and debugging an existing script
 - Lab 1: Analyzing and debugging scripts
- Module 8: Understanding Windows PowerShell Workflow

- Lesson 1: Understanding Windows PowerShell Workflows
- Lesson 2: Running Windows PowerShell Workflows
- Lab 1: Create and run Windows PowerShell Workflows

REQUIREMENTS:

- Experience as a Windows System Administrator
- Prior scripting or programming experience
- All the prerequisites can be met by successfully taking the 10961 - Automating Administration with Windows PowerShell course

Difficulty level



CERTIFICATE:

Certificate of completing an authorized Microsoft training

TRAINER:

Microsoft Certified Trainer